Fall 2018 Levee Maintenance Deficiency Summary Report

Overall LMA & Unit Ratings, including DWR Erosion Survey

San Joaquin River Basin

RD2091	Overall LMA	Total LMA		Threshold Perce					
Reclamation District No. 2091 Chase	Rating	Miles	however, U Rated Miles are present, so the Overall LMA Rating is M instead of A.						
	M *	7.51	ridang io in i	Design & System					
Rated Item		Maintena	nce Deficiency		Enforc	ement	Obsole		
Nated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles	
Earthen Levee			T						
Vegetation	0.14		0.14	1.86%					
Trim / Thin Trees	0.01		0.01	0.13%					
Erosion / Bank Caving	0.01	0.03	0.13	1.73%					
Supplemental			l		2.22				
DWR UCIP Field Study					0.02				
DWR UCIP LMA Responsibility									
LMA Totals:	0.16	0.03	0.28	3.73% *	0.02	0.00	0.00	0.00	
Unit No. 01 San Joaquin River RB	Overall Unit Rating	Total Unit Miles	* Overall Unit Threshold Percent is less than 10.00%; however, U Rated Miles are present, so the Overall Unit Rating is M						
RD2091	M *	7.46	instead of A.						
		Maintena	nce Deficiency					Design & System Obsolescence	
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles	
Earthen Levee									
Vegetation	0.11		0.11	1.47%					
Trim / Thin Trees	0.01		0.01	0.13%					
Erosion / Bank Caving	0.01	0.03	0.13	1.74%					
Supplemental									
DWR UCIP Field Study					0.01				
DWR UCIP LMA Responsibility									
Unit Totals:	0.13	0.03	0.25	3.35% *	0.01	0.00	0.00	0.00	
Unit No. 02 San Joaquin River NA	Overall Unit Rating	Total Unit Miles							
RD2091	U	0.05							
Dated Here	Maintenance Deficiency Enforcement		Design 8 Obsole						
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles	
Earthen Levee									
Vegetation	0.03		0.03	60.00%					
Supplemental			I						
DWR UCIP Field Study					0.01				
Unit Totals:	0.03	0.00	0.03	60.00%	0.01	0.00	0.00	0.00	

LMA District Cover Sheet

Fall 2018 Levee Inspection Results

Reclamation District No. 2091 Chase

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)					
† Overall LMA Rating (Fall Only)			M *						
** Non-receipt of Summer or Winter Inspection Reports may effect overall annual rating. * Overall LMA Threshold Percent is less than 10.00%; however, U Rated Miles are present, so the Overall LMA Rating is M instead of A.									
SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.									
FALL INSPECTIONS: The overall maintena within the attached un			nded to be an indiction						
Comments									

Unit Cover Sheet

Fall 2018 Levee Inspection Results

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles
Unit No. 01 San Joaquin River	Right	7.46

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			M *	
Date of Inspection	5/1/2018 - 5/1/2018		9/26/2018 - 9/26/2018	
DWR Inspector	Richard Willoughby		Corey Fujitani	
Accompanied By			Monte Hamilton City of Modesto	

^{*} Overall LMA Threshold Percent is less than 10.00%; however, U Rated Miles are present, so the Overall LMA Rating is M instead of A.

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	09/26/2018 09/26/2018	Corey Fujitani

LM Start	0.00	Rating **	Α	Issue No.		2		
LM End	0.00	Issue Type +	Ma	Location *				
Category	Earthen L	evee		GPS La	atituc	de/Longitude		
Calegory				Start		End		
Item	Operation	s & Maintena	nce		0		0	
item	Manuals				0		0	
DWR ID DWR_RD2091_01_s _ 2013_2								
		Comn	nent Cod	de				
		Inspect	or Comm	nent				
The LMA has copy of O & M manual on file at district office.								

No Photos

LM Start	0.00	Rating **	Α	Issue No.		4	
LM End	0.00	Issue Type +	Ma	Location *			
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item		cy Supplies &			0		0
пеш	Equipmen	nt			0		0
DWR ID	DWR_RD2	091_01_s _ 201	13_4				
		Comn	nent Cod	de			

No Photos

Inspector Comment

The LMA maintains adequate flood fight supplies and equipment.

LM Start	0.00	Rating **	Α	Issue No.		5			
LM End	0.00	Issue Type +	Ma	Location *					
Category Earthen Levee			GPS Latitude/Longitude						
Category				Start		End			
Item	Flood Pre	paredness &	Training		0		0		
item					0		0		
DWR ID	DWR_RD2	091_01_s _ 201	3_5						
		Comn	nent Coo	le					
	Inspector Comment								
The LMA r	naintains a	a good working	g knowle	dge of floo	d res	sponse			

No Photos

* Location

LS: Land Side N/A: Not Applicable WS: Water Side

** Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected

U : Unacceptable

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

A/W : Acceptable but Monitor & Maintain En : Enforcement

activities and has been involved in flood fight training.

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	09/26/2018 09/26/2018	Corey Fujitani

LM Start	0.08	Rating **	М	Issue No.		45
LM End	0.08	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	37.54197	0 °	37.541970°
пеш				-121.09398	0 °	-121.093980 °
DWR ID	23155					

Inspector Comment

Comment Code

FS_ID:43207 DS_ID:23155 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 10/15/2013 Appears abandoned and if so should be

done so properly. (W. Wylie - DWR UCIP)

FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal drainage pipe through the levee, 7.2 feet below the crown. Slide gate in a 36-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin O&M Manual 6, September 1961, (HLM 0.07), Drawing No. 07-04-1555, Sheets 1555/17 and 1555/55, (Station 906+85)].

FS Date: 1/29/2015 2:26:31 PM

LM Start	0.08	Rating **	М	Issue No.	45 (cont)
LM End	0.08	Issue Type +	Ma	Location *	





Slide gate in 36-inch CMP riser on WS toe.

Photo 2 of 3: UCIP_FA_2018_43207_38147.jpg



Slide gate in 36-inch CMP riser on WS toe.

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	09/26/2018 09/26/2018	Corey Fujitani

LM Start	0.08	Rating **	М	Issue No.	45 (cont)	
LM End	0.08	Issue Type +	Ма	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start End		
Item	DWR UCI	P LMA Respo	onsibility	37.54197	0°	37.541970°
пеш				-121.09398	0°	-121.093980 °
DWR ID	23155					

Inspector Comment

Comment Code

FS_ID:43207 DS_ID:23155 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 10/15/2013 Appears abandoned and if so should be

done so properly. (W. Wylie - DWR UCIP)

FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal drainage pipe through the levee, 7.2 feet below the crown. Slide gate in a 36-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin O&M Manual 6, September 1961, (HLM 0.07), Drawing No. 07-

04-1555, Sheets 1555/17 and 1555/55, (Station 906+85)].

FS Date: 1/29/2015 2:26:31 PM



CMP stormdrain at outlet off WS toe.

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	09/26/2018 09/26/2018	Corey Fujitani

LM Start	0.10	Rating **	М	Issue No.		46
LM End	0.10	Issue Type +	Ma	Location *		
Category				GPS Latitude/Longitude		
Calegory				Start End		
Item	DWR UCI	P LMA Respo	onsibility	37.54203	o°	37.542030°
пеш				-121.09437	o°	-121.094370°
DWR ID	23156					

Inspector Comment

Comment Code

FS_ID:53094 DS_ID:23156 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 10/18/2018 Crossing remains abandoned. Unable to locate WS outlet due to dense vegetation. Crossing has been downgraded from Urgent to Non-Urgent. No integrity issues were observed along pipe alignment. LMA is still seeking proper abandonment or removal of this crossing. Crossing is part of the Deferred Maintenance Project (DMP) phase 1 inspection. No video inspection has been completed yet. (O. Magana - DWR UCIP) 11/18/2016 Same as last inspection this is a non-functional crossing with no visible inlet on LS or outlet on WS. The only appurtenance found at this location is a CMP riser with a missing cover located on the WS. This crossing remains Urgent since the pipe on the WS may still be openned. According to Mike Alves, this crossing is abandoned and the City of Modesto is working with CVFPB to authorize proper abandonment/removal. The City is working at finding funds to pay for proper abandonment/removal of all the drainage structures through this levee. (O. Magana - DWR UCIP)10/15/2013 Pipe open on WS and slide gate has been removed. Appears abandoned and should be done so properly. (W. Wylie - City of Modesto)

FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal drainage pipe through the levee, 9 feet below the crown. Slide gate in a corrugated metal pipe (CMP) riser located on the waterside (WS) slope. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin O&M Manual 6, September 1961, (HLM 0.10), Drawing No. 07-04-1555, Sheets 1555/17 and 1555/55, (Station 907+55)].



36-inch CMP riser on WS slope.

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	09/26/2018 09/26/2018	Corey Fujitani

LM Start	0.10	Rating **	М	Issue No.	46 (cont)		
LM End	0.10	Issue Type +	Ма	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory				Start End			
Item	DWR UCI	P LMA Respo	onsibility	37.54203	0°	37.542030°	
пеш				-121.09437	o°	-121.094370°	
DWR ID	23156				·	·	

Inspector Comment

Comment Code

FS_ID:53094 DS_ID:23156 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 10/18/2018 Crossing remains abandoned. Unable to locate WS outlet due to dense vegetation. Crossing has been downgraded from Urgent to Non-Urgent. No integrity issues were observed along pipe alignment. LMA is still seeking proper abandonment or removal of this crossing. Crossing is part of the Deferred Maintenance Project (DMP) phase 1 inspection. No video inspection has been completed yet. (O. Magana - DWR UCIP) 11/18/2016 Same as last inspection this is a non-functional crossing with no visible inlet on LS or outlet on WS. The only appurtenance found at this location is a CMP riser with a missing cover located on the WS. This crossing remains Urgent since the pipe on the WS may still be openned. According to Mike Alves, this crossing is abandoned and the City of Modesto is working with CVFPB to authorize proper abandonment/removal. The City is working at finding funds to pay for proper abandonment/removal of all the drainage structures through this levee. (O. Magana - DWR UCIP)10/15/2013 Pipe open on WS and slide gate has been removed. Appears abandoned and should be done so properly. (W. Wylie - City of Modesto)

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Slide gate missing from open end of pipe at WS slope.

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	09/26/2018 09/26/2018	Corey Fujitani

LM Start	0.10	Rating **	М	Issue No.	46 (cont)		
LM End	0.10	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory	legory			Start		End	
Item	DWR UCI	P LMA Respo	onsibility	37.54203	0°	37.542030	0
пеш				-121.09437	o°	-121.094370	0
DWR ID	23156					·	

Inspector Comment

Comment Code

FS_ID:53094 DS_ID:23156 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 10/18/2018 Crossing remains abandoned. Unable to locate WS outlet due to dense vegetation. Crossing has been downgraded from Urgent to Non-Urgent. No integrity issues were observed along pipe alignment. LMA is still seeking proper abandonment or removal of this crossing. Crossing is part of the Deferred Maintenance Project (DMP) phase 1 inspection. No video inspection has been completed yet. (O. Magana - DWR UCIP) 11/18/2016 Same as last inspection this is a non-functional crossing with no visible inlet on LS or outlet on WS. The only appurtenance found at this location is a CMP riser with a missing cover located on the WS. This crossing remains Urgent since the pipe on the WS may still be openned. According to Mike Alves, this crossing is abandoned and the City of Modesto is working with CVFPB to authorize proper abandonment/removal. The City is working at finding funds to pay for proper abandonment/removal of all the drainage structures through this levee. (O. Magana - DWR UCIP)10/15/2013 Pipe open on WS and slide gate has been removed. Appears abandoned and should be done so properly. (W. Wylie - City of Modesto)

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Overview of levee crown at pipe crossing.

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	09/26/2018 09/26/2018	Corey Fujitani

	_					
LM Start	0.23	Rating **	A/W	Issue No.		15
LM End	0.23	Issue Type +	Ma	Location *		LS
Catagony	Earthen L	evee		GPS La	atitud	e/Longitude
Category				Start		End
Item	Erosion /	Bank Caving		37.5415	50°	37.541550°
item				-121.0967	'42 °	-121.096742°
DWR ID	DWR_RD2	091_01_s _ 201	16_15			
		Comn	nent Cod	de		
E1 : Note a	and monito	or erosion site				
		Inspecto	or Comm	nent		
Inspector Comment Caving on landward shoulder noted in 2017 possible collapsed pipe. Monitor for potential reoccurance.						

LM Start	0.23	Rating **	A/W	Issue No.	15 (cont)
I M End	0.23	Issue Type +	Ma	Location *	LS

Photo 1 of 2 : FA_2018_RD2091_318_15_20180905_00015.jpg

Looking southwest at the dip on the landside shoulder.

Photo 2 of 2: FA_2018_RD2091_318_15_20180905_00016.jpg



Looking northeast at the dip in the landside shoulder.

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	09/26/2018 09/26/2018	Corey Fujitani

LM Start	0.24	Rating **	М	Issue No.		47	
LM End	0.24	Issue Type +	Ма	Location *			
Category	Suppleme		GPS La	atitud	le/Longitude		
Category				Start End			
Item	DWR UCI	P LMA Respo	nsibility	37.5415	64°	37.541564°	
пеш			-121.0967	92°	-121.096792°		
DWR ID	R ID 23158						
Comment Code							

Inspector Comment

FS_ID:53431 DS_ID:23158 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 10/18/2018 Crossing remains abandoned. Unable to locate WS outlet due to dense vegetation. Crossing has been downgraded from Urgent to Non-Urgent, no integrity issues were observed along the pipe alignment. LMA is still seeking proper abandonment or removal of this crossing. This crossing is part of the Deferred Maintenance Project (DMP) phase 1 inspection. No video inspection has been completed yet. (O. Magana - DWR UCIP) 11/18/2016 Same as last inspection. This crossing remains Urgent due to the flap gate still missing from the WS toe. According to Mike Alves, this crossing is an abandoned line and the City of Modesto is working with CVFPB to authorize proper abandonment/removal. The City is working at finding funds to pay for proper abandonment/removal of all the drainage structures through this levee. (O. Magana - DWR UCIP)10/15/2013 Flap gate has fallen off at WS toe. Appears abandoned and if so should be done so properly. (W. Wylie - DWR UCIP)

FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal drainage pipe through the levee, 10 feet below the crown. Flap gate on the waterside (WS) end. Drain opening is located approximately 15 feet off the landside (LS) toe. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin O&M Manual 6, September 1961, (HLM 0.23), Drawing No. 07-04-1555, Sheets 1555/17 and 1555/55, (Station 915+00)].

FS Date: 10/18/2018

Photo 1 of 3: UCIP_FA_2018_53431_38156.jpg



Pipe visible in canal on WS toe.

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	09/26/2018 09/26/2018	Corey Fujitani

LM Start	0.24	Rating **	М	Issue No.		47 (cont)		
LM End	0.24	Issue Type +	Ма	Location *				
Supplemental				GPS Latitude/Longitude				
Calegory	Category					End		
Item	DWR UC	P LMA Respo	nsibility	37.5415	64°	37.541564°		
пеш				-121.0967	92°	-121.096792°		
DWR ID	D 23158							
Comment Code								

Inspector Comment

FS_ID:53431 DS_ID:23158 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 10/18/2018 Crossing remains abandoned. Unable to locate WS outlet due to dense vegetation. Crossing has been downgraded from Urgent to Non-Urgent, no integrity issues were observed along the pipe alignment. LMA is still seeking proper abandonment or removal of this crossing. This crossing is part of the Deferred Maintenance Project (DMP) phase 1 inspection. No video inspection has been completed yet. (O. Magana - DWR UCIP) 11/18/2016 Same as last inspection. This crossing remains Urgent due to the flap gate still missing from the WS toe. According to Mike Alves, this crossing is an abandoned line and the City of Modesto is working with CVFPB to authorize proper abandonment/removal. The City is working at finding funds to pay for proper abandonment/removal of all the drainage structures through this levee. (O. Magana - DWR UCIP)10/15/2013 Flap gate has fallen off at WS toe. Appears abandoned and if so should be done so properly. (W. Wylie - DWR UCIP)

FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal drainage pipe through the levee, 10 feet below the crown. Flap gate on the waterside (WS) end. Drain opening is located approximately 15 feet off the landside (LS) toe. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin O&M Manual 6, September 1961, (HLM 0.23), Drawing No. 07-04-1555, Sheets 1555/17 and 1555/55, (Station 915+00)].



Flapgate has fallen off at WS toe.

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	09/26/2018 09/26/2018	Corey Fujitani

LM Start	0.24	Rating **	М	Issue No.		47 (cont)
LM End	0.24	Issue Type +	Ма	Location *		
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	37.54156	4 °	37.541564°
пеш				-121.09679	2°	-121.096792°
DWR ID	23158					

Inspector Comment

Comment Code

FS_ID:53431 DS_ID:23158 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 10/18/2018 Crossing remains abandoned. Unable to locate WS outlet due to dense vegetation. Crossing has been downgraded from Urgent to Non-Urgent, no integrity issues were observed along the pipe alignment. LMA is still seeking proper abandonment or removal of this crossing. This crossing is part of the Deferred Maintenance Project (DMP) phase 1 inspection. No video inspection has been completed yet. (O. Magana - DWR UCIP) 11/18/2016 Same as last inspection. This crossing remains Urgent due to the flap gate still missing from the WS toe. According to Mike Alves, this crossing is an abandoned line and the City of Modesto is working with CVFPB to authorize proper abandonment/removal. The City is working at finding funds to pay for proper abandonment/removal of all the drainage structures through this levee. (O. Magana - DWR UCIP)10/15/2013 Flap gate has fallen off at WS toe. Appears abandoned and if so should be done so properly. (W. Wylie - DWR UCIP)

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Concrete headwall under pipe at WS toe.

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	09/26/2018 09/26/2018	Corey Fujitani

LM Start	0.25	Rating **	A/W	Issue No.		16		
LM End	0.28	Issue Type +	Ma	Location *		LS		
Category Earthen Levee				GPS La	atitud	le/Longitude		
Calegory				Start		End		
Item	Erosion / Bank Caving				92°	37.541408°		
пеш			-121.097052 °		-121.097453°			
DWR ID DWR_RD2091_01_s _ 2016_16								
		Comn	nent Cod	de				
E1 : Note a	and monito	or erosion site						
		Inspecto	or Comm	nent				
Inspector Comment Several sites of rill erosion and possible rodent holes along landward shoulder and slope.								

LM Start	0.25	Rating **	A/W	Issue No.	16 (cont)
LM End	0.28	Issue Type +	Ma	Location *	LS



Looking northwest at rill erosion on landside slope.

Photo 2 of 2: FA_2018_RD2091_318_16_20180905_00018.jpg



Looking east at rill erosion above rodent hole on landward slope. (Spring 2017)

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	09/26/2018 09/26/2018	Corey Fujitani

LM Start	0.63	Rating **	М	Issue No.		48			
LM End	0.63	Issue Type +	Ma	Location *					
Category	Supplemental			Supplemental			GPS La	titud	e/Longitude
Calegory	Category					End			
Item	DWR UCI	IP LMA Respo	onsibility	37.54122	0°	37.541220°			
пеш				-121.10388	0°	-121.103880 °			
DWR ID	23161					·			

Inspector Comment

Comment Code

FS_ID:51639 DS_ID:23161 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 11/18/2016 Crossing has been downgraded from Urgent to Non-Urgent since the flap gate appears to fully close. According to Mike Alvez, this crossing is abandoned and the City of Modesto is working with CVFPB to authorize proper abandonment/removal. The City is working at finding funds to pay for proper abandonment/removal of all the drainage structures through this levee. (O. Magana - DWR UCIP)10/15/2013 Appears abandoned and if so should be done so properly. (W. Wylie - DWR UCIP) FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal

FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal drainage pipe through the levee, 12 feet below the crown. Flap gate and concrete headwall on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin O&M Manual 6, September 1961. (HLM 0.64)].

FS Date: 11/18/2016

LM Start	0.63	Rating **	М	Issue No.	48 (cont)
LM End	0.63	Issue Type +	Ma	Location *	



24-inch CMP on concrete headwall with flapgate on WS toe.

Photo 2 of 3: UCIP_FA_2018_51639_38157.jpg



24-inch CMP on concrete headwall with flapgate on WS toe.

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	09/26/2018 09/26/2018	Corey Fujitani

LM Start	0.63	Rating **	М	Issue No.		48 (cont)
LM End	0.63	Issue Type +	Ма	Location *		
Category				GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	37.54122	o°	37.541220°
пеш				-121.10388	o°	-121.103880 °
DWR ID	23161					·

Inspector Comment

Comment Code

FS_ID:51639 DS_ID:23161 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 11/18/2016 Crossing has been downgraded from Urgent to Non-Urgent since the flap gate appears to fully close. According to Mike Alvez, this crossing is abandoned and the City of Modesto is working with CVFPB to authorize proper abandonment/removal. The City is working at finding funds to pay for proper abandonment/removal of all the drainage structures through this levee. (O. Magana - DWR UCIP)10/15/2013 Appears abandoned and if so should be done so properly. (W. Wylie - DWR UCIP) FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal

drainage pipe through the levee, 12 feet below the crown. Flap gate and concrete headwall on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin O&M Manual 6, September 1961, (HLM 0.64)].

FS Date: 11/18/2016

Photo 3 of 3: UCIP_FA_2018_51639_76677.jpg



View of LS.

LM Start	0.94	Rating **	A/W	Issue No.		14	
LM End	6.84	Issue Type +	Ma	Location *			
Category Supplemental GPS Latitude/Lo			upplemental GPS			le/Longitude	
Calegory				Start		End	
2017 Storm Damage			37.5377	75°	37.482295 °		
пеш				-121.1067	Latitude/Longitud End 775 ° 37.48	-121.051592°	
DWR ID	DWR ID DWR_RD2091_01_f _ 2017_14						
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Wave wash damage/erosion of 2 miles ... see attached

description and photos

Site ID No:471

Site Designation:LMA-298 Repair Type: Erosion Rating:Area of Concern Field Date:7/20/2017

Notes: Low priority because wavewash scarps are less than 1 ft and do not cut into prisim significantly and can be repaired by district through O&M. There is also a large berm here. Wavewash is present on both LS and WS.



* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	09/26/2018 09/26/2018	Corey Fujitani

LM Start	0.94	Rating **	A/W	Issue No.	14 (cont)			
LM End	6.84	Issue Type +	Ma	Location *				
Category				GPS Latitude/Longitude				
Calegory			Start		End			
Item	2017 Storm Damage			37.5377	75 °	37.482295 °		
пеш			-121.10673	30°	-121.051592°			
DWR ID	DWR_RD2091_01_f _ 2017_14							
	Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Wave wash damage/erosion of 2 miles ... see attached

description and photos

Site ID No:471

Site Designation:LMA-298

Repair Type: Erosion

Rating: Area of Concern Field Date:7/20/2017

Notes: Low priority because wavewash scarps are less than 1 ft and do not cut into prisim significantly and can be repaired by district through O&M. There is also a large berm here. Wavewash is present on both LS and WS.

LM Start	0.94	Rating **	A/W	Issue No.	14 (cont)
LM End	6.84	Issue Type +	Ma	Location *	



Photo 3 of 3: LEVAL_FA_2018_471_2340.jpg



A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	09/26/2018 09/26/2018	Corey Fujitani

LM Start	1.41	Rating **	A/W	Issue No.		11		
LM End	1.43	Issue Type +	Ма	Location *		WS		
Earthen Levee				GPS La	atitud	e/Longitude		
Category				Start		End		
Item	Erosion / Bank Caving				43°	37.530896°		
пеш				-121.1067	-121.106737 °			
DWR ID DWR_RD2091_01_f _ 2017_11								
		Comn	nent Cod	de				
E2 : Sched	dule repair	of erosion site	e prior to	the next in	spec	ction.		
		Inspecto	or Comm	nent				
Minor erosion on waterside toe.								



Looking south at erosion on waterside slope.

LM Start	1.41	Rating **	A/W	Issue No.	24		
LM End	1.44	Issue Type +	Ma	Location *			
Category			GPS Latitude/Longitude				
Calegory			Start		End		
Item	2017 Storm Damage			37.5311	70°	37.530760°	
item				-121.1067	50°	-121.106710 °	
DWR ID DWR_RD2091_01_f _ 2017_24							
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Site ID No:132

Site Designation:DWR_RD2091_01_R_2012_01

Repair Type: Erosion Rating:Area of Concern Field Date:6/7/2017

Notes: Wavewash erosion up to 12" deep at high water mark.



CR : Crown

LS: Land Side N/A: Not Applicable WS: Water Side

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated

C : Corrected

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

A/W : Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	09/26/2018 09/26/2018	Corey Fujitani

LM Start	1.41	Rating **	A/W	Issue No.	24 (cont)			
LM End	1.44	Issue Type +	Ма	Location *				
Category				GPS Latitude/Longitude				
Calegory			Start		End			
Item	2017 Stor	m Damage		37.53117	'0°	37.530760°		
пеш				-121.10675	50°	-121.106710°		
DWR ID	DWR_RD2091_01_f _ 2017_24							
Comment Code								

Inspector Comment

Levee Evaluation Comments

Description: Site ID No:132

Site Designation:DWR_RD2091_01_R_2012_01

Repair Type: Erosion Rating:Area of Concern Field Date:6/7/2017

Notes: Wavewash erosion up to 12" deep at high water mark.

LM Start	1.41	Rating **	A/W	Issue No.	24 (cont)
LM End	1.44	Issue Type +	Ma	Location *	



Photo 3 of 3: LEVAL_FA_2018_132_1187.jpg



CR : Crown

LS : Land Side N/A: Not Applicable WS: Water Side

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	09/26/2018 09/26/2018	Corey Fujitani

LM Start	2.00	Rating **	С	Issue No.		17	
LM End	2.03	Issue Type +	Ма	Location *		LS	
Category Earthen Levee			GPS Latitude/Longitude				
Calegory			Start		End		
Item	Vegetation			37.526646°		° 37.526259 °	
пеш				-121.0998	10°	-121.099464°	
DWR ID	DWR ID DWR_RD2091_01_f _ 2017_17						
Comment Code							
V2 : Remove the wild growth other than native grasses from the levee							

slopes.

Inspector Comment

No Photos

LM Start	2.05	Rating **	M	Issue No.		18	
LM End	2.06	Issue Type +	Ma	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
				Start		End	
Item	Erosion / Bank Caving			37.5260	83°	37.525897°	
пеш				-121.0993	28°	-121.099116°	
DWR ID	DWR_RD2091_01_f _ 2017_18						
Comment Code							

E2: Schedule repair of erosion site prior to the next inspection.

Inspector Comment

Erosion at the landside toe.



Looking southeast at erosion on the toe of the landside slope.

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	09/26/2018 09/26/2018	Corey Fujitani

LM Start	2.15	Rating **	A/W	Issue No.		25	
LM End	2.15	Issue Type +	Ob	Location *			
Category			GPS Latitude/Longitude				
Calegory	Category			Start		End	
Item	2017 Stor	m Damage		37.5252	20°	37.525220	0
item				-121.0977	00°	-121.097700	0
DWR ID	DWR_RD2	091_01_f _ 201	7_25				
		_					

Comment Code

Inspector Comment

Levee Evaluation Comments

Description:
Site ID No:124
Site Designation:199-1
Repair Type: Seepage

Rating: Field Date: Notes:

Item

LM Start 2.41 Rating ** A/W Issue No. 26 Issue Type + Ob Location * 2.49 LM End Supplemental GPS Latitude/Longitude Category End 2017 Storm Damage 37.522090° 37.521140°

DWR ID DWR_RD2091_01_s _ 2018_26

Comment Code

-121.095580°

-121.095080°

Inspector Comment

Levee Evaluation Comments

Description: Site ID No:125

Site Designation:DWR_RD2091_01_R_2012_05

Repair Type: Seepage

Rating: Field Date: Notes: No Photos

No Photos

* Location

LS: Land Side N/A: Not Applicable

WS: Water Side

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected + Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	09/26/2018 09/26/2018	Corey Fujitani

LM Start	2.61	Rating **	A/W	Issue No.		20
LIVI Start	2.01	rtating	~/ V V	13300 140.		20
LM End	2.64	Issue Type +	Ma	Location *		LS
Category Earthen Levee			GPS Latitude/Longitude			
Category			Start		End	
Item	Animal Control			37.52010	08°	37.520027 °
пеш				-121.0931	47 °	-121.092767°
DWR ID	DWR ID DWR_RD2091_01_s _ 2017_20					
Comment Code						
A3 : No ro	A3 : No rodents visible, but rodent burrows visible; need to backfill and					

compact or grout burrows.

Inspector Comment

Burrows no longer presen. (2018)

Rating ** Issue No. A/W LM Start 2.84 38 3.46 Issue Type + Location * LM End Supplemental GPS Latitude/Longitude Category Start End 2017 Storm Damage 37.519210° 37.511720° Item -121.089010 ° -121.087380° DWR_RD2091_01_s _ 2018_38 DWR ID Comment Code

Inspector Comment

Levee Evaluation Comments

Description: Site ID No:128

Site Designation:199-105 Repair Type: Seepage

Rating: Field Date: Notes:

No Photos

No Photos

* Location LS : Land Side N/A: Not Applicable WS: Water Side

A : Acceptable M : Minimally Acceptable

U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	09/26/2018 09/26/2018	Corey Fujitani

LM Start	3.91	Rating **	A/W	Issue No.		30
LM End	3.95	Issue Type +	Ma	Location *	n* LS	
Category Earthen Levee			GPS Latitude/Longitude			
Calegory	Calegory			Start		End
Item	Animal Control			37.506753°		37.506251 °
item				-121.0827	48°	-121.082606 °
DWR ID	DWR_RD2	091_01_f _ 201	7_30			
Comment Code						
A3 : No rodents visible, but rodent burrows visible; need to backfill and						

compact or grout burrows.

Inspector Comment

Burrows no longer present . (2018)

Photo 1 of 1: FA_2018_RD2091_318_30_20180905_00028.jpg



Looking south at landside slope.

LM Start	4.25	Rating **	A/W	Issue No.		22
LM End	4.25	Issue Type +	Ma	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory			Start		End	
Item	Animal Co	ontrol		37.5019	07°	37.501907°
пеш				-121.0821	23°	-121.082123°
DWR ID	DWR_RD2	091_01_s _ 201	7_22			

Comment Code

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

Burrows no longer present. (2018)

Photo 1 of 1: FA_2018_RD2091_318_22_20180905_00021.jpg



Looking south at rodent activity on landward shoulder and slope.

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	09/26/2018 09/26/2018	Corey Fujitani

LM Start	4.44	Rating **	A/W	Issue No. 39		39	
LM End	4.54	Issue Type +	Ob	Location *			
Category Supplemental			GPS Latitude/Longitude				
			Start		End		
ltom	ltem 2017 Storm Damage			37.4994	40°	37.498040	0
пеш				-121.0807	20°	-121.080720	0
DWR ID	DWR_RD2	091_01_s _ 201	8_39				
Comment Code							

No Photos

Inspector Comment

Levee Evaluation Comments

Description: Site ID No:131

Site Designation:DWR_RD2091_01_R_2012_02

Repair Type: Seepage

Rating: Field Date: Notes:

LM Start	4.57	Rating **	A/W	Issue No.		40	
LM End	5.00	Issue Type +	Ob	Location *			
Category				GPS Latitude/Longitude			
				Start		End	
2017 Storm Damage			37.49778	30°	37.492630°		
item				-121.08034	10°	-121.076070 °	
DWR ID DWR_RD2091_01_s _ 2018_40							
Comment Code							

No Photos

Inspector Comment

Levee Evaluation Comments

Description: Site ID No:130

Site Designation:199-100 Repair Type: Seepage

Rating: Field Date: Notes:

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	09/26/2018 09/26/2018	Corey Fujitani

LM Start	4.59	Rating **	М	Issue No.		49	
LM End	4.59	Issue Type +	En	Location *			
Category	ental	GPS Latitude/Longitude					
Category	alegory					End	
Item	DWR UCI	P Field Study		37.49739	0°	37.497390	0
пеш				-121.08037	0 °	-121.080370	0
DWR ID	23165						

Inspector Comment

Comment Code

FS_ID:43209 DS_ID:23165 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 10/15/2013 Appears abandoned and if so should be

done so properly. (P. Amatya - DWR UCIP)

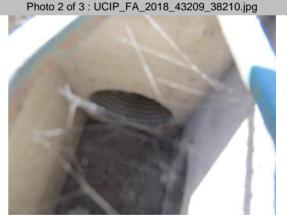
FIELD_STRUCT_DESC: 36-inch corrugated metal irrigation pipe through the levee, 15 feet below the crown. Abandoned concrete inlet box on the waterside (WS) slope of the levee. 6-foot by 5-foot concrete distribution box at the landside (LS) toe. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin O&M Manual 6, September

1961, (HLM 4.67), 30-inch pipe listed]. FS Date: 1/29/2015 2:27:42 PM

LM Start	4.59	Rating **	М	Issue No.	49 (cont)
LM End	4.59	Issue Type +	En	Location *	



Distribution box on LS toe.



Open CMP pipe through levee at distribution box on LS toe.

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	09/26/2018 09/26/2018	Corey Fujitani

LM Start	4.59	Rating **	М	Issue No.		49 (cont)	
LM End	4.59	Issue Type +	En	Location *			
Category	ental	GPS Latitude/Longitude					
Calegory	Category					End	
Item	DWR UCI	P Field Study		37.49739	0°	37.497390	0
пеш				-121.08037	0 °	-121.080370	0
DWR ID	23165						

Inspector Comment

Comment Code

FS_ID:43209 DS_ID:23165 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 10/15/2013 Appears abandoned and if so should be

done so properly. (P. Amatya - DWR UCIP)
FIELD_STRUCT_DESC: 36-inch corrugated metal irrigation pipe through the levee, 15 feet below the crown. Abandoned concrete inlet box on the waterside (WS) slope of the levee. 6-foot by 5-foot concrete distribution box at the landside (LS) toe. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin O&M Manual 6, September

1961, (HLM 4.67), 30-inch pipe listed]. FS Date: 1/29/2015 2:27:42 PM



Abandoned concrete box on WS slope.

	LM Start	4.83	Rating **	A/VV	issue No.		34	
	LM End	4.83	Issue Type +	Ma	Location *		WS	
Category		Earthen L	evee	GPS Latitude/Longitude				
	Calegory				Start		End	
	Item	Erosion / I		37.4943	96°	37.494396	0	
	ROIII				-121.0783	06 °	-121.078306	0
	DWR ID DWR_RD2091_01_f _ 2017_34							
Comment Code								

E1: Note and monitor erosion site.

Inspector Comment

No Photos

* Location		** Rating		+ Issue Type
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CP · Crown		II · I Inaccontable	AAM - Accontable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	09/26/2018 09/26/2018	Corey Fujitani

LM Start	4.83	Rating **	A/W	Issue No.	41		
LM End	4.83	Issue Type +	Ма	Location *			
Category	ental	GPS Latitude/Longitude					
Calegory				Start		End	
Item	2017 Stor	m Damage		37.49430	0°	37.494300°	
пеш				-121.07830	0°	-121.078300°	
DWR ID	DWR_RD2	R_RD2091_01_f _ 2017_41					
	Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: Site ID No:117

Site Designation:LMA-37 Repair Type: Erosion Rating:Area of Concern Field Date:6/7/2017

Notes: Very minor erosion at toe of levee. Depth of erosion is 3" max.

LM Start	4.83	Rating **	A/W	Issue No.	41 (cont)
LM End	4.83	Issue Type +	Ma	Location *	



Photo 2 of 3: LEVAL_FA_2018_117_854.jpg



CR : Crown

LS : Land Side N/A: Not Applicable WS: Water Side

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	09/26/2018 09/26/2018	Corey Fujitani

LM Start	4.83	Rating **	A/W	Issue No.	41 (cont)		
LM End	4.83	Issue Type +	Ма	Location *			
Category	ental	GPS Latitude/Longitude					
Category				Start		End	
Item	2017 Stor	m Damage		37.49430	0°	37.494300°	
пеш				-121.07830	0°	-121.078300°	
DWR ID	DWR_RD2	R_RD2091_01_f _ 2017_41					
	Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: Site ID No:117

Site Designation:LMA-37 Repair Type: Erosion Rating:Area of Concern Field Date:6/7/2017

Notes: Very minor erosion at toe of levee. Depth of erosion is 3" max.



LM Start	4.84	Rating **	A/W	Issue No.	10		
LM End	4.85	Issue Type +	Ma	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
				Start		End	
Item	Animal Co	ontrol		37.494297°		37.494115°	
item				-121.0782	33 °	-121.078100°	
DWR ID DWR_RD2091_01_f _ 2018_10							
Comment Code							

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

No visible burrows and rodent control program visible. (2018)

Photo 1 of 3: FA_2018_RD2091_318_10_20180927_00050.jpg



View of landside slope. (2018)

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	09/26/2018 09/26/2018	Corey Fujitani

LM Start	4.84	Rating **	Issue No.		10 (cont)		
LM End	4.85	Issue Type +	Ма	Location *		LS	
Earthen Levee				GPS Latitude/Longitude			
Category				Start		End	
Item	Animal Co	ontrol		37.4942	97°	37.494115°	
item				-121.0782	33 °	-121.078100°	
DWR ID DWR_RD2091_01_f _ 2018_10							

Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

No visible burrows and rodent control program visible. (2018)

LM Start	4.84	Rating **	A/W	Issue No.	10 (cont)
LM End	4.85	Issue Type +	Ma	Location *	LS

Photo 2 of 3 : FA_2018_RD2091_318_10_20180927_00049.jpg



View of rodent control program in place. (2018)

Photo 3 of 3: FA_2018_RD2091_318_10_20180905_00004.jpg



Looking southeast at landside slope. (2017)

Photo 1 of 1: FA_2018_RD2091_318_19_20180927_00048.jpg

LM Start	4.84	Rating **	Α	Issue No.		19	
LM End	4.84	Issue Type +	Ma	Location *	LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Vegetatio	Vegetation			97°	37.494297°	
item				-121.0782	33°	-121.078233°	
DWR ID	DWR_RD2	091_01_f _ 201	8_19			·	
		Comn	nent Cod	de			
V1 : Contre		grass and wee	ds on th	e levee slo	oes a	and	
Inspector Comment							
Vegetation was well maintained along levee							



09 28 2019

Representative view of landside slope looking downstream. (2018)

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	09/26/2018 09/26/2018	Corey Fujitani

LM Start	5.20	Rating **	A/W	Issue No.		13
LM End	5.20	Issue Type +	Ма	Location *		LS
Category	evee	GPS La	atitud	e/Longitude		
Calegory			Start		End	
Item	Slope Sta	bility		37.4907	'56 °	37.490756°
item				-121.073410 °		-121.073410°
DWR ID	DWR_RD2	091_01_f _ 201	6_13			
		Comn	nent Cod	de		
S3 : Repai access wh		slope damag le.	ed by ve	ehicle traffic	and	prevent
		Inspecto	or Comm	nent		
Vehicle traffic damaging slope on landward slope.						

LM Start	5.20	Rating **	A/W	Issue No.	13 (cont)
I M End	5.20	Issue Type +	Ma	Location *	LS

Photo 1 of 2 : FA_2018_RD2091_318_13_20180905_00010.jpg

Looking southeast at the landside slope.

Photo 2 of 2: FA_2018_RD2091_318_13_20180905_00011.jpg



Looking at damage on landside slope.

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	09/26/2018 09/26/2018	Corey Fujitani

LM Start	5.60	Rating **	A/W	Issue No.	lo. 42			
LM End	5.65	Issue Type +	Ob	Location *				
Category Supplemental				GPS Latitude/Longitude				
				Start		End		
ltom	2017 Storm Damage				37.486820 ° 37.4			
пеш	Item				00°	-121.067530	0	
DWR ID DWR_RD2091_01_s _ 2018_42								
Comment Code								

No Photos

Inspector Comment

Levee Evaluation Comments

Description: Site ID No:129

Site Designation:199-101 Repair Type: Seepage

Rating: Field Date: Notes:

LM Start	5.66	Rating **	С	Issue No.	28	
LM End	5.66	Issue Type +	Ма	Location *	LS	
Category	evee	GPS Latitude/Longitude				
Category				Start		End
Item	Trim / Thi	n Trees		37.48610	1°	37.486101°
item				-121.06762	° 0	-121.067620 °
DWR ID	/R ID DWR_RD2091_01_s _ 2018_28					
Comment Code						

No Photos

T1 : Trim trees to at least five feet above ground level.

Inspector Comment

LS : Land Side N/A : Not Applicable WS : Water Side

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiency Ob : Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	09/26/2018 09/26/2018	Corey Fujitani

LM Start	5.92	Rating **	М	Issue No.		12	
LM End	5.92	Issue Type +	Ма	Location *		LS	
Category	Earthen L	evee		GPS Latitude/Longitude			
Calegory				Start		End	
Item	Trim / Thi	n Trees		37.4859	98°	37.485998 °	
пеш				-121.063323 °		-121.063323 °	
DWR ID	DWR_RD2	091_01_f _ 201	5_12			·	
		Comn	nent Cod	de			
T1 : Trim t	rees to at l	east five feet	above g	round level.			
	Inspector Comment						



Looking southeast at untrimmed tree at landward toe. (Spring 2018)

LM Start	5.99	Rating **	A/W	Issue No.		43	
LM End	5.99	Issue Type +	Ob	Location *			
Category	Suppleme	ental	GPS Latitude/Longitude				
Category				Start		End	
Item	2017 Stor	m Damage		37.4864	90°	37.486490°	
item				-121.0622	70°	-121.062270 °	
DWR ID	DWR_RD2	_RD2091_01_f _ 2017_43					

Inspector Comment

Comment Code

Levee Evaluation Comments

Description: Site ID No:127

Site Designation:199-4 Repair Type: Seepage

Rating: Field Date: Notes: No Photos

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	09/26/2018 09/26/2018	Corey Fujitani

LM Start	6.23	Rating **	M	Issue No.		36		
LM End	6.27	Issue Type +	Ma	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	le/Longitude		
Calegory				Start		End		
Item	Vegetatio	n		37.4857	24°	37.485234°		
пеш				-121.0584	43°	-121.058032 °		
DWR ID DWR_RD2091_01_f _ 2017_36								
		Comn	nent Cod	de				
V2 : Remo	ve the wild	d growth other	than na	tive grasses	s fro	m the levee		
	Inspector Comment							



Looking southeast at landside slope.

LM Start	6.29	Rating **	A/W	Issue No.		44		
LM End	6.75	Issue Type +	Ob	Location *				
Catagory	Category				GPS Latitude/Longitude			
Calegory	Category					End		
Item	2017 Stor	m Damage		37.48504	0°	37.481740°		
пеш				-121.05768	0°	-121.052910°		
DWR ID DWR_RD2091_01_s _ 2018_44								
	Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Site ID No:126

Site Designation:199-106 Repair Type: Seepage

Rating: Field Date: Notes: No Photos

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	09/26/2018 09/26/2018	Corey Fujitani

LM Start	6.87	Rating **	М	Issue No.		37	
LM End	6.94	Issue Type +	Ма	Location *		LS	
Category	evee	GPS La	tituc	le/Longitude			
Calegory	Start					End	
Item	Vegetatio	n		37.4820	21 °	37.481994°	
пеш				-121.0512	60°	-121.049991 °	
DWR ID DWR_RD2091_01_f _ 2017_37							
Comment Code							

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

LM Start	7.42	Rating **	U	Issue No.		8
LM End	7.45	Issue Type +	Ma	Location *		LS
	Earthen Levee					le/Longitude
Category				Start		End
Item	Erosion /	37.4793	08°	37.478998 °		
ILEIII				-121.0447	08°	-121.044660 °
DWR ID	DWR_RD2	091_01_s _ 201	7_8			

Comment Code

E2: Schedule repair of erosion site prior to the next inspection.

Inspector Comment

Repaired area with concrete containing rebar. Need to remove rebar.

LM Start	7.42	Rating **	U	Issue No.	8 (cont)
LM End	7.45	Issue Type +	Ma	Location *	LS

No Photos



Looking northeast at concrete rubble with rebar at landward toe next to canal.

Photo 2 of 3: FA_2018_RD2091_318_8_20180905_00002.jpg



Looking east at concrete rubble with rebar at landward toe next to canal.

* Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

** Rating

A : Acceptable N : Not Inspected/Rated M : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

** Rating

A : Acceptable C : Corrected Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	09/26/2018 09/26/2018	Corey Fujitani

LM Start	7.42	Issue No.		8 (cont)				
LM End	7.45	Issue Type +	Ma	Location *	LS			
Category	evee	GPS La	atitud	le/Longitude				
Calegory	Salegory					End		
Item	Erosion /	Bank Caving		37.4793	08°	37.478998°		
пеш				-121.0447	08°	-121.044660 °		
DWR ID DWR_RD2091_01_s _ 2017_8								
	Comment Code							

E2: Schedule repair of erosion site prior to the next inspection.

Inspector Comment

Repaired area with concrete containing rebar. Need to remove rebar.



Looking east at repaired site on waterward slope and toe. (Spring 2018)

LM Start	7.45	Rating **	A/W	Issue No.		23	
LM End	7.45	Issue Type +	Ma	Location *			
Category				GPS Latitude/Longitude			
Category			Start		End		
Itom	2017 Storm Damage			37.4790	00°	37.479000°	
Item				-121.0440	00°	-121.040000 °	
DWR ID DWR_RD2091_01_f _ 2017_23							
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Sloughing at Mile 7.59 of the San Joaquin River

Site ID No:473

Site Designation:LMA-300 Repair Type: Erosion Rating:Area of Concern Field Date:7/20/2017

Notes: Concrete rubble was installed here during the storms after noticing cracks and sloughing. It has rebar sticking out and needs to be replaced with clean rip rap. Responibility is grey here because TID maintains channel and placed concrete during storm.

Photo 1 of 3: LEVAL_FA_2018_473_2326.jpg



LS : Land Side N/A : Not Applicable WS : Water Side

* Rating

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated

C : Corrected

A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

tain En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	09/26/2018 09/26/2018	Corey Fujitani

LM Start	7.45	Rating **	A/W	Issue No.		23 (cont)		
LM End	7.45	Issue Type +	Ма	Location *				
Supplemental				GPS Latitude/Longitude				
Category			Start		End			
Item	2017 Stor	2017 Storm Damage			00°	37.479000°		
пеш		-121.0440	00°	-121.040000°				
DWR ID DWR_RD2091_01_f _ 2017_23								
	Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Sloughing at Mile 7.59 of the San Joaquin River

Site ID No:473

Site Designation:LMA-300 Repair Type: Erosion Rating:Area of Concern Field Date:7/20/2017

Notes: Concrete rubble was installed here during the storms after noticing cracks and sloughing. It has rebar sticking out and needs to be replaced with clean rip rap. Responibility is grey here because TID maintains channel and placed concrete during storm.

LM Start	7.45	Rating **	A/W	Issue No.	23 (cont)
LM End	7.45	Issue Type +	Ma	Location *	



Photo 3 of 3: LEVAL_FA_2018_473_2331.jpg



CR : Crown

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Unit Cover Sheet

Fall 2018 Levee Inspection Results

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles
Unit No. 02 San Joaquin River		0.05

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			U	
Date of Inspection	5/1/2018 - 5/1/2018		9/26/2018 - 9/26/2018	
DWR Inspector	Richard Willoughby		Corey Fujitani	
Accompanied By			Monte Hamilton City of Modesto	

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 San Joaquin River		0.05	09/26/2018 09/26/2018	Corey Fujitani

LM Start	0.02	Rating **	М	Issue No.		2	
LM End	0.05	Issue Type +	Ma	Location *		LS	
Category Earthen Levee			GPS Latitude/Longitude				
Calegory	Category			Start		End	
Item	Vegetatio	n		37.4823	95 °	37.484354	0
пеш				-121.0512	83 °	-121.049873	0
DWR ID	DWR_RD2	091_02_f _ 201	8_2				
Comment Code							

V1: Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

Tall grassy vegetation on landside slope and toe needs to be controlled.

LM Start	0.02	Rating **	M	Issue No.		3
LM End	0.02	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	titud	e/Longitude
Category				Start		End
Item	DWR UCI	DWR UCIP Field Study				37.482450 °
iteiii				-121.0512	20°	-121.051220°
DWR ID	23175					

Comment Code

Inspector Comment

FS_ID:51390 DS_ID:23175 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 11/18/2016 Same as last inspection. This is a nonfunctional crossing with flap gate in the closed position. This crossing has been downgraded from Urgent to Non-Urgent -- no integrity issues were observed on the levee crown or slopes. According to Mike A. this crossing is abandoned and the City of Modesto is working with CVFPB to authorize proper abandonment/removal. The City is working at finding funds to pay for proper abandonment/removal of all the drainage structures through this levee. (O. Magana - DWR UCIP)10/15/2013 Flap gate rusted in-place and does not function. In closed position. (W. Wylie - DWR UCIP)

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 16.4 feet below the crown. Flap gate on the waterside (WS) toe. [Additional Reference(s): DWR Levee Log, 1992]. FS Date: 11/18/2016

Photo 1 of 3: UCIP_FA_2018_51390_38216.jpg

No Photos



24-inch CMP with flapgate visible on WS toe.

LS: Land Side N/A: Not Applicable WS: Water Side

Acceptable

Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiency Ob : Design & System Obsolescence

A/W : Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 San Joaquin River		0.05	09/26/2018 09/26/2018	Corey Fujitani

LM Start	0.02	Rating **	М	Issue No.		3 (cont)
LM End	0.02	Issue Type +	En	Location *		
Category Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End
Item	DWR UC	IP Field Study		37.4824	50°	37.482450
пеш				-121.05122	20°	-121.051220
DWR ID	23175					

Inspector Comment

Comment Code

FS_ID:51390 DS_ID:23175 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 11/18/2016 Same as last inspection. This is a nonfunctional crossing with flap gate in the closed position. This crossing has been downgraded from Urgent to Non-Urgent -- no integrity issues were observed on the levee crown or slopes. According to Mike A. this crossing is abandoned and the City of Modesto is working with CVFPB to authorize proper abandonment/removal. The City is working at finding funds to pay for proper abandonment/removal of all the drainage structures through this levee. (O. Magana - DWR UCIP)10/15/2013 Flap gate rusted in-place and does not function. In closed position. (W. Wylie - DWR UCIP)

FIÉLD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 16.4 feet below the crown. Flap gate on the waterside (WS) toe. [Additional Reference(s): DWR Levee Log, 1992]. FS Date: 11/18/2016

LM Start	0.02	Rating **	М	Issue No.	3 (cont)
LM End	0.02	Issue Type +	En	Location *	



Overview photo of levee crown at crossing.

Photo 3 of 3: UCIP_FA_2018_51390_76686.jpg



Overview of levee crown at crossing and at a distance there is a shooting range.

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement